

REMARKS

Claims 1-22 stand rejected in the present application. Claims 1, 3-5, 11, 13 and 17-22 have been amended by way of this amended. Claims 1-22 remain pending and at issue.

Claims 3, 4 and 5 have been amended to correct typographical errors. Clarifying amendments have been made to claim 13.

Claims 1-22 stand rejected under 35 USC §102(e) as being anticipated by Blass (U.S. Patent No. 7,280,968).

“A claim is anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single, prior art reference.” *Verdegaal Bros. v. Union Oil Co., of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Blass generally discloses digitally generating an output speech signal using prosodic characteristics extracted from an input speech signal received from a user. A speech recognition application converts an input speech signal into a representative text string and extracts prosodic characteristics of the input speech signal. Examples of extracted prosodic characteristics are speed before and after each word, pauses before and after each word, the rhythm of the words, the relative tones of the words and the relative stresses of each word and/or syllable. The speech recognition application assigns a language proficiency level to the user based on an analysis of the input speech signal. For example, the phrase “I vuld like to vly to Orrlatdo” is assigned a relatively low language proficiency level. In the event the speech recognition application is unable to transcribe a portion of the input speech signal, a dictation system generates a query to the user requesting clarification.

A backend system receives the text string representation of the input speech signal and responsively generates an output text string. A text to speech application converts the output text string into an output speech signal for transmission to the user. The output text string is annotated with stresses, pitches and other intonation qualities associated with the grammatical structure of the text in the output text string.

Prosodic characteristics previously extracted from the input speech signal, such as speed before and after each word, pauses before and after each word, and pronunciation patterns, are used to annotate the output text string to emulate the input speech signal. Each phonetic segment of the output text string is assigned a segment identity, a duration, context information, accent information and syllable stress values. A costing algorithm is used to select specific phenomes for use in the output speech signal. Baseline weighted factors such as tonal factors and word stress factors are altered based on the prosodic characteristics extracted from the input speech signal. In some instances, the phonemes and/or words extracted from the input speech signal are used in the output speech signal. Further annotations detail durational and intonation characteristics such as rhythm, relative tones and relative stresses associated with joining phonetic segments to emulate the prosodic characteristics of the input speech signal. The prosodic characteristics of the output speech signal are further adjusted based on the language proficiency of the user. For example when the user has a relatively lower language proficiency level, the speech output signal is adjusted to maximize clarity thereby producing slower and less naturally sounding speech.

Amended independent claims 1 and claims 2-10 dependent thereon recite a method for call center dialog management. Amended independent claim 18 recites a computer usable medium embodying computer program code for

commanding a computer to effect call center dialog management and amended independent claims 20 and 22 recite a system for call center dialog management. A first call center dialog segment having a current call center dialog property is presented to a contact. A contact dialog segment is received from the contact. A dialog property keyword within the contact dialog segment is identified. *The dialog property keyword includes a request for a modification of the current call center dialog property. The current call center dialog property is replaced with a new call center dialog property in accordance with the request.* A second call center dialog segment having the new call center dialog property is presented to the contact.

Blass discloses adjusting the prosodic characteristics of an output speech signal based on prosodic characteristics extracted from an input speech signal. However, Blass does not disclose identifying a dialog property keyword within a contact dialog segment *where the dialog property keyword includes a request for a modification of a current call center dialog property and replacing the current call center dialog property with a new call center dialog property in accordance with the request* as recited by claims 1-10, 18, 20 and 22. Since Blass does not disclose each of the elements recited by claims 1-10, 18, 20 and 22, it follows that such claims are not anticipated thereby. Accordingly, Applicant respectfully requests that the rejection of claims 1-10, 18, 20 and 22 as being unpatentable over Blass be withdrawn.

Amended independent claim 11 and claims 12-16 dependent thereon recited a method for call center dialog management. Amended independent claim 19 recites a computer usable medium embodying computer program code for commanding a computer to effect call center dialog management and amended independent claim 21 recites a system for call center dialog management. A contact is presented with a first call center dialog segment

having a current call center dialog property. A contact dialog segment is received from the contact. *A determination is made regarding whether the contact dialog segment includes a request for help associated with interpreting the first call center dialog segment. A first dialog metric is generated based on the determination. A set of dialog metrics including the first dialog metric is generated from the contact dialog segment.* The set of dialog metrics is compared against a set of dialog metric thresholds. The current call center dialog property is replaced with a new call center dialog property, if the generated dialog metrics vary from the set of thresholds by a predetermined amount. A second call center dialog segment having the new call center dialog property is presented to the contact.

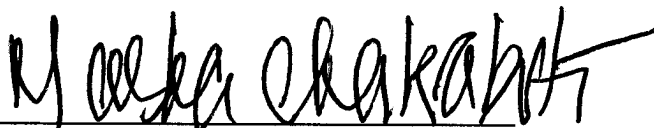
Blass discloses the use of a costing algorithm for selecting specific phenomes for use in an output speech signal. A baseline of weighted factors such as tonal factors and word stress factors are altered based on prosodic characteristics extracted from the input speech signal. The altered weighted factors are used to generate the output speech signal. However, Blass does not disclose *making a determination regarding whether a contact dialog segment received from a contact includes a request for help associated with interpreting a first call center dialog segment that was presented to the contact* as recited by claims 11-16, 19 and 21. Furthermore, Blass does not disclose *generating a first dialog metric based on the determination and generating a set of dialog metrics including the first dialog metric from the contact dialog segment* as recited by claims 11-16, 19 and 21. Since Blass does not disclose each of the elements recited by claims 11-16, 19 and 21 it follows that such claims are not anticipated thereby. Accordingly, Applicant respectfully requests that the rejection of claims 11-16, 19 and 21 as being unpatentable over Blass be withdrawn.

Amended independent claim 17 recites a method for call center dialog management. A contact is presented with a first call center dialog segment having a current call center dialog property. A contact dialog segment is received from the contact. *A determination is made regarding whether the contact dialog segment includes a dialog property keyword, where the dialog property keyword includes a request for a modification of the current call center dialog property.* A set of dialog metrics is generated from the contact dialog segment. The set of dialog metrics is compared against a set of dialog metric thresholds. *The current call center dialog property is replaced with a new call center dialog property in accordance with the request based on the determination.* The current call center dialog property is replaced with a second new call center dialog property, if no dialog property keyword is identified and the generated dialog metrics vary from the set of thresholds by a first predetermined amount. A second call center dialog segment having the new call center dialog property is presented to the contact.

As mentioned above, Blass discloses the use of a costing algorithm for selecting specific phenomes for use in an output speech signal. A baseline of weighted factors such as tonal factors and word stress factors are altered based on prosodic characteristics extracted from the input speech signal. The altered weighted factors are used to generate the output speech signal. However, Blass does not disclose *determining whether the contact dialog segment includes a dialog property keyword where the dialog property keyword includes a request for a modification of the current call center dialog property and replacing the current call center dialog property with a new call center dialog property in accordance with the request based on the determination* as recited by claim 17. Since Blass does not disclose each of the elements recited by claim 17 it follows that such claim is not anticipated thereby. Accordingly, Applicant respectfully requests that the rejection of claim 17 as being unpatentable over Blass be withdrawn.

For the foregoing reasons, reconsideration and withdrawal of the rejection of the claims at issue and allowance thereof are respectfully requested.

Respectfully submitted,

By: 
Manisha Chakrabarti
Attorney Reg. No. 41,665

Manisha Chakrabarti
Attorney at Law
3108 South Route 59, Suite 124-282
Naperville, Illinois 60564
Telephone: (630) 355-3376

Date: April 15, 2008